

Claims

1. 1. A magnetic pole for magnetic levitation vehicles comprising of a core (1) having
a center axis (5) and a winding (10, 35, 36) applied on said core (1),
5 characterized in that said winding (10, 35, 36) has two disks (11,12) spaced in
the direction of the center axis (5), said disks being formed of conductor strip
sections (21a, 21b, 29, 30) coiled in an opposite winding sense and in several
layers around said core (1) and conductively connected to each other at ends
near said core (1) by a central connection section (21c, 31) which defines the
10 axial distance (a) of said two disks (11,12) and the winding sense of the two
conductor strip sections (21a, 21b, 29, 30).
2. A magnetic pole according to Claim 1, characterized in that said winding (10) is
made of a continuous, one-piece conductor strip (21) basically having the same
15 width (b) throughout, wherein the axial distance (a) of the two disks (11, 12) is
defined by folding in the area of the connection section (21c).
3. A magnetic pole according to Claim 2, characterized in that the conductor strip
(21) is folded along two folding lines (22, 23) which are arranged in parallel to
20 each other and obliquely to a longitudinal axis (24) of the conductor strip (21).
4. A magnetic pole according to Claim 1, characterized in that said winding (35,
36) is made of a continuous conductor strip (28) in which the connection section
(31) is configured as a planar formed part which has two connecting terminals
25 (31a, 31b) that define the axial distance (a) of the two disks and are connected
to one conductor strip section (29, 30) each.
5. A magnetic pole according to Claim 4, characterized in that the two conductor
strips (29, 30) are connected by welding to the connection section (31).

6. A magnetic pole according to any of the preceding Claims 1 to 5, characterized in that at least one conductor strip section (29, 30) is properly cut at one outer longitudinal rim (29a, 30a) so that its width (e) continuously increases from the connection section (31) in longitudinal direction up to a maximum value (e1).
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7. A magnetic pole according to Claim 6, characterized in that the maximum value (e1) of width, viewed in longitudinal direction, is reached after a length that corresponds to a number of layers (34) which is smaller than the total number of layers (34) of the pertaining disk.
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8. A magnetic pole according to Claim 7 characterized in that the maximum value (e1) of the width is reached after a length of the conductor strip (29, 30) that corresponds to approximately ten layers (34).
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9. A magnetic pole according to any of the preceding claims 6 to 8, characterized in that the longitudinal rims (29a, 30a) of conductor strip sections (29, 30) are symmetrically tailor-cut with respect to a longitudinal axis (32) extending vertically to the center axis (5) of said conductor strip (28), but with some offset formed by the connection section (31).
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10. A magnetic pole according to any of the preceding claims 6 to 9, characterized in that the longitudinal rims (29a, 30a) are tailor-cut along straight lines or continuous curves.
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11. A magnetic pole according to any of Claims 4 to 10, characterized in that the connection section (31) is so configured that it forms the first layer of the two disks wound around said core (1) and covers a slot formed by the distance (a) of the two disks.
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12. A magnetic pole according to any of the preceding claims 1 to 11, characterized in that said core (1) at its shell surface is wrapped by an insulation layer (3) and that a partially conductive foil is located between said insulation layer (3) and the layer (14, 34a) of said disk (11, 12) bordering it, said conductive foil resting

against steps formed by tailor-cutting of said conductor strip (21, 28).